

# **Proposal for an Evolution of Intelligence Focus Group in the NASA Astrobiology Institute**

Lori Marino

*Neuroscience and Behavioral Biology Program*

*Emory University*

*Atlanta, Georgia*

*USA*

Lmarino@emory.edu

Christopher F. Chyba

*Carl Sagan Chair for the Study of Life in the Universe and Principal Investigator, NAI Lead Team*

*SETI Institute*

*Mountain View, California*

*USA*

For over a century there has been an ongoing debate about intelligence and astrobiology that has mainly taken the form of qualitative polemical arguments. Alternatively, treating ‘intelligence’ as a property of the biological universe that can be quantitatively investigated—even though, as with life itself, we do not yet know if it is unique to Earth, rare, or common in the Galaxy—should allow us to, conservatively, move beyond polemical argumentation and replace non-empirical assumptions with actual data. In this poster we describe a proposal for an Evolution of Intelligence (EI) Focus Group within NAI. The purpose of the EI Focus Group is to address questions on the emergence, maintenance, prevalence, and nature of intelligence from an astrobiological perspective. There is an extensive body of empirical work on the evolution of intelligence that can be brought to bear on astrobiological questions. The EI Focus Group would emphasize reproducible, quantitative methods applied to long-standing questions about the likelihood of the evolution of intelligence in the universe.

In addition to describing our plan for establishing the EI Focus Group, we will outline some of the relevant questions the group will be addressing and describe the ways in which an EI Focus Group can contribute to NAI on many levels.